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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,393	07/18/2003	Dwight J. Zuck	Z-001-2C	4671
27946	7590	06/17/2004		
ARTHUR J. BEHIEL 6601 KOLL CENTER PARKWAY SUITE 245 PLEASANTON, CA 94566				
EXAMINER				
STINSON, FRANKIE L.				
ART UNIT		PAPER NUMBER		
1746				

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
10/622,393	ZUCK ET AL.	
Examiner	Art Unit	
FRANKIE L. STINSON	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 10-12 and 20 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 8, 9 and 13-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/18/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 10-12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 58-109159 (Japan'159).

Re claim 1, Japan'159 is cited disclosing a system for removing a contaminate layer from a surface of a component (4) comprising a receptacle (1) receiving the component and a first volume of liquid, with the liquid selected to remove the contaminate layer and at least one volume displacement element (6) immersed in the liquid displacing a second volume, that differs from the claim only in the recitation of the second volume being greater than half the first volume. Nonetheless, to have the volume relationship as claimed is deemed to be an obvious matter of design depending on the desired efficiency and could clearly be optimized through routine experimentation (see MPEP 2144.05, "OPTIMIZATION OF RANGES"). As for the component being a semiconductor process element, the same is deemed to be a statement of intended use/preamble and has not been afforded the weight of a limitation in that the body of the claim fails to give life and meaning to said intended use/preamble. Re claim 2, Japan'159 discloses the plurality of elements. Re claim 3, Japan'156 discloses the elements being freely movable. Re claims 4 and 5, Japan'159 discloses the shapes. Re claim 6, Japan'159 is believed to disclose the elements being at least one hundred. Re claim 7, no patentable distinction is deemed to exist between the inherent component volume in Japan'159,

and that as instantly claimed. Re claim 10, Japan'159 discloses the support (5). Re claim 11, Japan'159 discloses the pommel (3). Re claim 12, Japan'159 discloses the density as claimed. Re claim 20, Japan'159 discloses the elements being non reactive with the liquid.

3. Claims 8, 9 and 13-19 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Kusuki et al., Japan'453, Japan'190, Shiplov, Japan'451, Tanaka et al., Tsutsumi, Germany'699, Ajayi, Lanham, Smith, Pett, Roland, note the displacement elements.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached M-F from 5:30 a.m. to 2:00 p.m. and some Saturdays from 5:30 a.m. to 11:30 a.m.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to TECHNOLOGY CENTER 1700 (571) 272-1700.

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Any inquiry for missing parts of this Office Action (copies of references, pages, forms etc.), contact the TEAM LEADER Ms. Nicol Scott (571) 272-1045.

fls



FRANKIE L. STINSON  
Primary Examiner  
Art Unit 1746